HONDA WT20K1C 2" ELECTRIC DRIVEN TRASH PUMP

AND

HONDA ES6500c GENERATOR

CANADIAN PETROLEUM ASSOCIATION

EXECUTIVE SUMMARY

An electric motor driven trash pump has been designed and developed for recovery of highly volatile, flammable products such as condensate, gasoline, diesel, reformate and pipeline gravity, also crude oil that has been contaminated with rocks, dirt and sand.

CONCLUSION

The electric motor driven trash pump has demonstrated that it has the ability to recover and pump gasoline grade hydrocarbon products in a safe efficient manner.

RECOMMENDATION

The electric motor driven trash pump and 6500 watt generator are to be put in all the CPA OSCAR trailers, to be utilized for pumping of contaminated, highly volatile, flammable products.

INTRODUCTION

Recovery of highly volatile hydrocarbon spills has always presented safety problems due to the explosive, flammable nature of the product being recovered.

In most cases recovery of the spilled fluids can not be attempted until the product has weathered and the light ends have evaporated to a point where the explosive and/or flash potential has been minimized.

In the case of tank or tank truck rollovers, special pumping trucks have to be called in to evacuate the product.

In an effort to increase safety, decrease spill response time, improved recovery and/or pumping of hydrocarbons, the Canadian Petroleum Association initiated the design, development and testing of a 2" Electric Driven Trash Pump. The Trash Pump has the capability to safely recover and/or pump volatile flammable substances such as condensate, gasoline, diesel and light gravity crude oil products.

2" ELECTRIC DRIVEN TRASH PUMPS
PRINCIPLE OF OPERATION

Motor: The 2" electric Trash Pump consists of motor: Baldor 2HP motor, Class 1, Group D, Class 2, Group F and G. For use in hazardous locations, Explosion proof switch C.S.A. approved, with dual voltage 115/208-230, Amps 23, RPM 3450, Cycle 60, 100 foot electric cable, Type SO, Vapor proof Connector.

Pump: Honda WT20K1C Trash Pump
Impeller and pump body made of Duraprene
Grounding straps to pump and frame
2-Type A Camlocks

Weight: Motor - Pump - Frame = 75 lbs approximately

Dimensions: 30" long, 24" high, 20" wide

This unit is powered by an ES6500c Honda Generator with safety fuses and electric breakers.

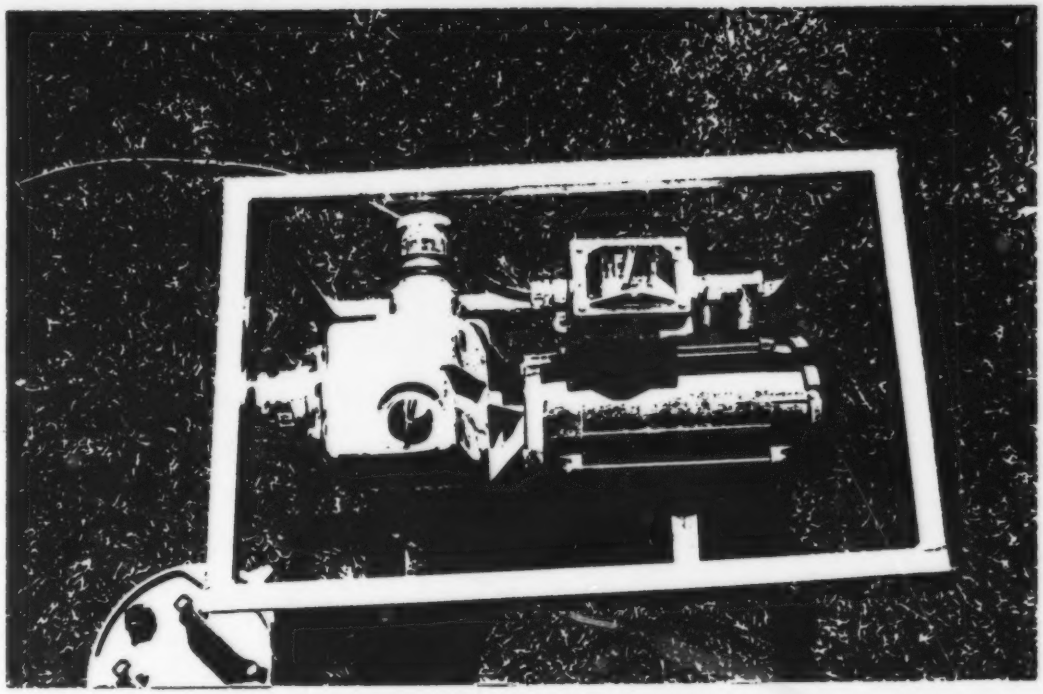
This unit in maximum design recovery mode can pump up to 30 gpm of hydrocarbon products at "0" head.

Note: Ensure Auto Throttle switch is in "off" position on the generator, prior to operating pump.

SAFETY ALERT

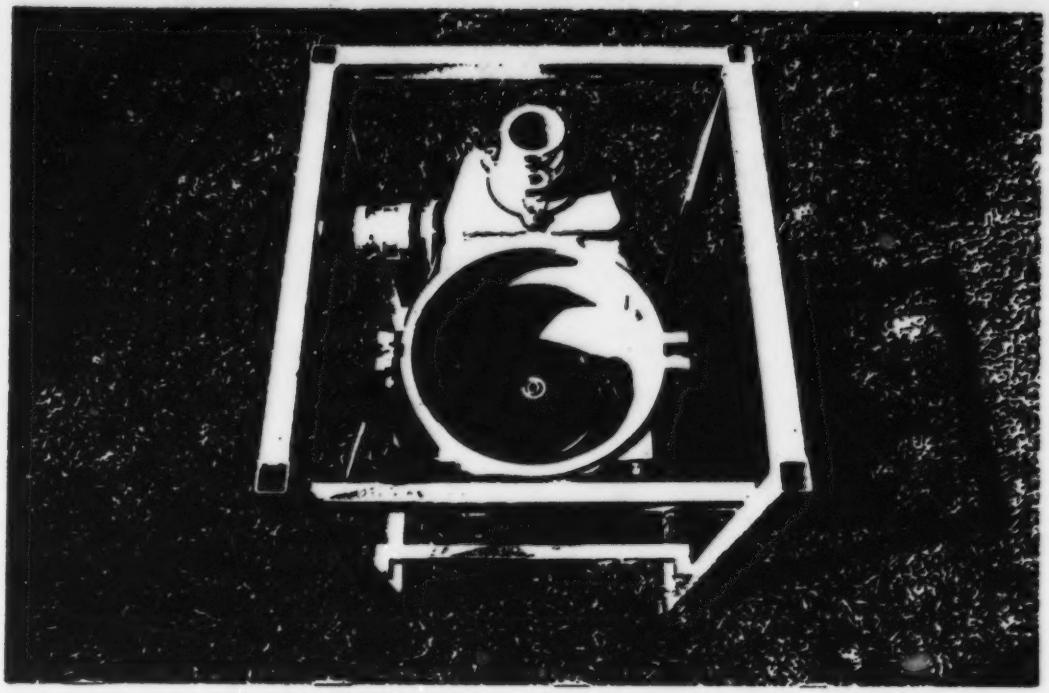
Never operate pump while workers are within 30 metres of unit. Always use Remote Control Power Swith on generator to activiate pump. Always ensure that generator is positioned up wind, up slope and a minimum of 30 metres away from the pump.

Use2" (Brass) Ball valve at the end of the petroleum product Rigid Suction Discharge Hose. Never opreate pump without grounding line and rod hook up assembly. Insure the area is monotered for explosive gaseous mixtures before starting the cleanup and evacuation of product.



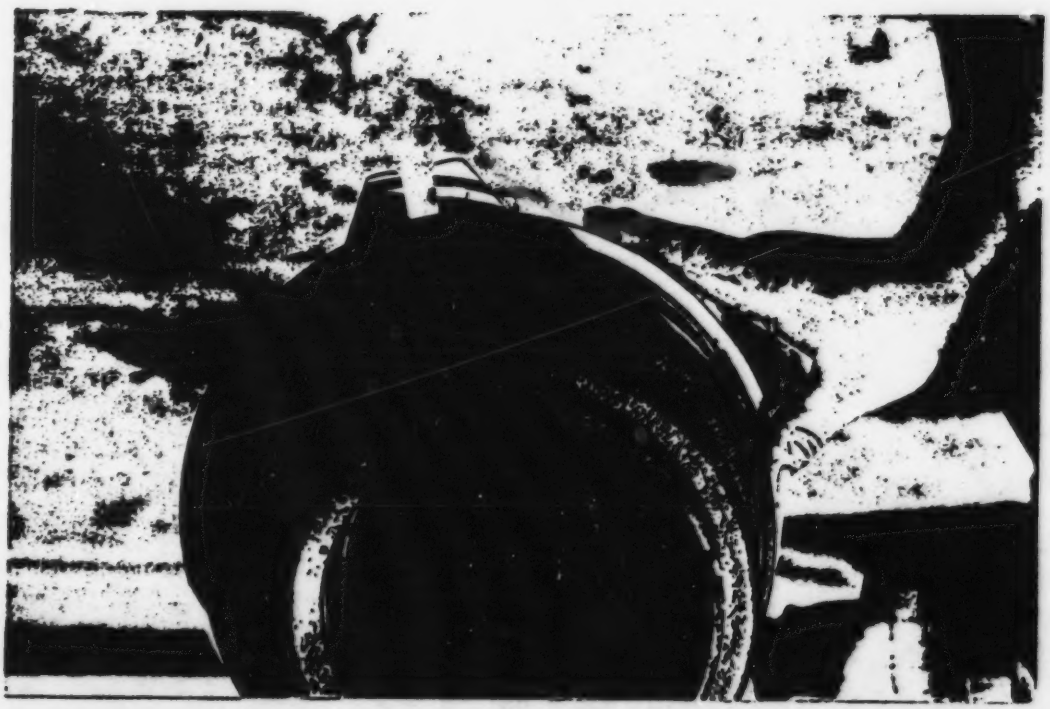
HONDA WT20K1C/ELECTRIC MOTOR DRIVE

Motor:	Baldor 2 HP, Class 1, Group D, Class 2 Group F & G For use in hazardous locations Explosion proof switch C.S.A. approved Dual Voltage 115/208-230 Amps: 23 RPM: 3450 Cycle 60 150 feet electric cable, Type SO, Vapor Proof Connector
Pump:	Honda WT20K1C Trash Pump
Duraprene:	Impeller and Pump Body Grounding straps to pump and frame 2-Type A Cam locks



DURAPRENE IMPELLA

DURAPRENE PUMP BODY



This pump has demonstrated its ability to safely pump gasoline and condensate products, contaminated with rocks, dirt and sand

It can be operated from a portable remote power source up to 100 feet